

RP00236

Leader in Biomolecular Solutions for Life Science



Recombinant Human Cystatin-M/CST6 Protein

Catalog No.: RP00236 **Recombinant**

Sequence Information

| Species | Gene ID | Swiss Prot |
|--------------|---------|------------|
| HEK293 cells | 1474 | Q15828 |

Tags

C-His

Synonyms

CST6

Background

Cystatin E/M encoded by the CST6 gene is a member of family 2 of the cystatin superfamily. It inhibits papain and cathepsin B, two of the cysteine proteases. Its mRNA was found in many tissues by the two groups who did initial cloning. However, its protein was found only in skin and sweat glands by a third group. In addition to being a cysteine protease inhibitor, cystatin E/M is also a substrate for transglutaminases. It is required for viability and for correct formation of cornified layers in the epidermis and hair follicles, as *ichq* mice, with a null mutation in the cystatin E/M gene, have defects in epidermal cornification and die between 5 and 12 days of age. Cystatin E/M expression and function may not be limited to cutaneous epithelia. For example, it is found in rat brain and is induced during neuronal cell differentiation.

Product Information

| Source | Purification |
|--------------|-----------------------------------|
| HEK293 cells | ≥ 95 % as determined by SDS-PAGE. |

Endotoxin

< 0.01 EU/μg of the protein by LAL method

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Basic Information

Description

Recombinant Human Cystatin-M/CST6 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Arg29-Met149) of human CST6 (Accession #NP_001314.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

Measured by its ability to inhibit papain cleavage of a fluorogenic peptide substrate Z-FR-AMC. The IC50 value is approximately 16 nM.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

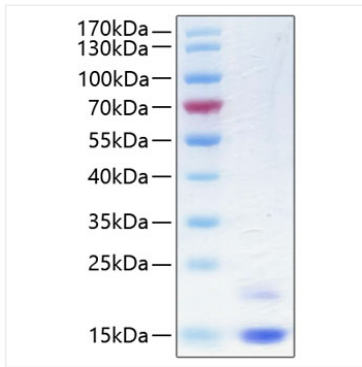
Contact



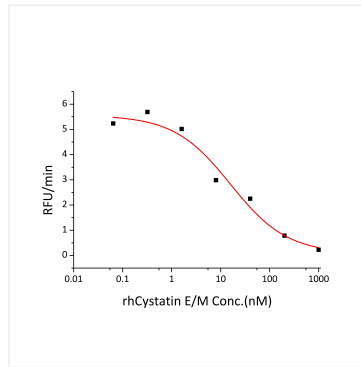
www.abclonal.com

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human Cystatin-M/CST6 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human CST6 inhibits papain cleavage of a fluorogenic peptide substrate Z-FR-AMC (Catalog # ES009). The IC₅₀ value is approximately 16nM.